

CONSTRUCTION MANAGEMENT

- CONTRACT –

LECTURE 2



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Ability to discuss and describe the general project management principles of construction industry.

CONTRACT

- A contract is **defined as an agreement between two parties that is enforceable by law.**
- The contract is to protect contractors and developers.
- It requires a 'meeting of the minds' and there must be a service and consideration.
- One party must agree to perform work (service) for the other party and receive payment (consideration) for the work.
- The contract must be enforceable by law, which for all practical purposes means the contract must be for a service that is legal.

- Although there is no actual requirement that a contract be written, realistically it must be.
- Oral contracts are essentially impossible to enforce in construction because of the lack of evidence regarding the scope of the agreement.
- Generally, written contracts eliminate problems by removing any doubt about the agreed-on terms.
- **Objectives developer** – implement the project successfully, as expected, and with minimum cost.
- **Objectives contractor** – maximize profits.

TYPES OF CONTRACT

There are many types of construction contracts, and the type of contract selected depends on the kind of work being performed and the conditions under which it is being performed.

- 1) Lump sum contract
- 2) Contract based on bill of quantities
(Design-bid-build, commonly called traditional)
- 1) Cost plus contract
- 2) Turnkey contract (Design-build)

Lump Sum Contract

- Contractor will carry out work as per the contract drawings and specifications with fixed prices.
- The contractor took the risk because the price estimate based on drawings and specifications. No bill of quantity given.
- Tender price does not change unless there are changes in the scope of work or work scope changes or changes in the prices of goods are allowed in the contract.

- Prices in the tender form is not changed, but the summary of the tender price must be agreed to reflect the cost of the actual work.
- Change - the budget is based on schedule of rates in the contract. If an employee is issued directly so the price in the summary of the tender price will be used.
- The contract type is suitable for smaller works and building standards. If the contract drawings and specifications is already exist, a contract of this type is easily and quickly.
- Problems that may arise is in terms of contract administration because not all of the scope of work specified in the contract.

Contract based on bill of quantities (BQ) (Design-bid-build, commonly called traditional)

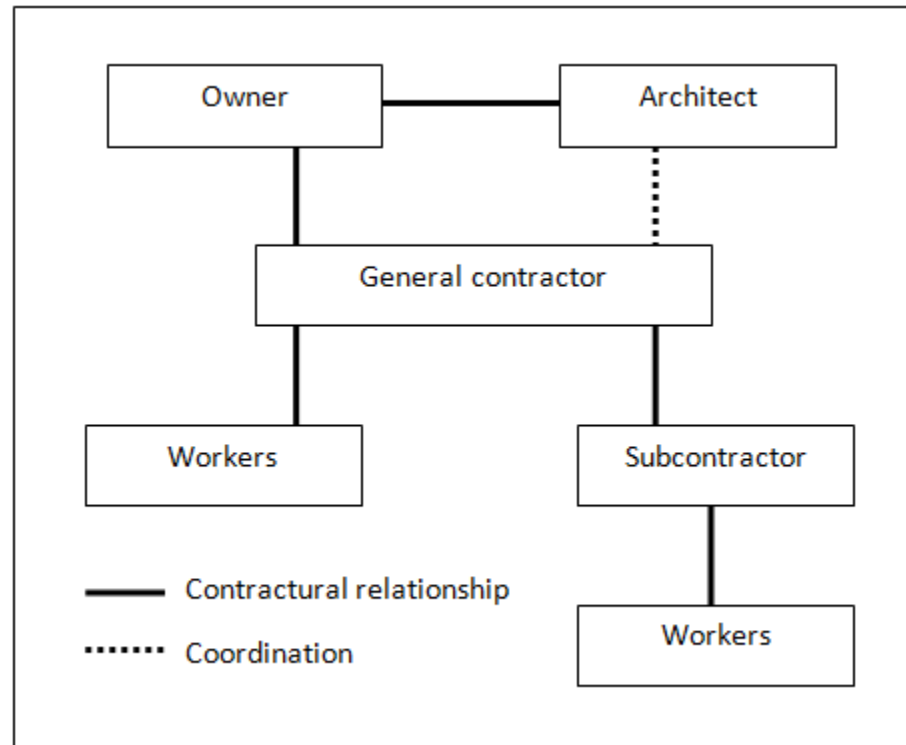


Figure 1: Design-bid-build contract relationships between owner, architect, general contractor and subcontractors.

- Bill of quantities to be part of the contract, so it is easier and the contract does not have a high risk of offer price.
- Quantity was measured again after the work is completed. Charges are based on the quantity and the rates specified.
- Estimates of changes based on the prices listed in the BQ.
- Rates in the BQ should be reviewed and agreed to represent the actual rate before signing the contract. However, the offer price can not be changed.

- The contract was for work that can be reliably measured.
- This contract did not cause problem.
- Contract administration when compared with lump sum contract is a detailed scope of work and rates are determined in detail.

To ensure that the project can be carried out with the perfect items below should be considered:

- Needs statement must be clear
- mutual trust between both parties
- scope of work and responsibility should be clearly defined.
- Contractors should have the expertise to manage.
- appropriate timing for the tender.

Cost Plus Contract

- With this contract, the contractor will be paid the actual cost of manpower, materials equipment used in the project and added profitability and overhead costs.
- So, the contractor will not face the risk of manpower and material price fluctuations in the market.

2 types of cost plus contract:

- 1) Cost plus contract and fixed fee or fixed %.
- 2) Target cost with a variable fee

Turnkey contract (Design-build)

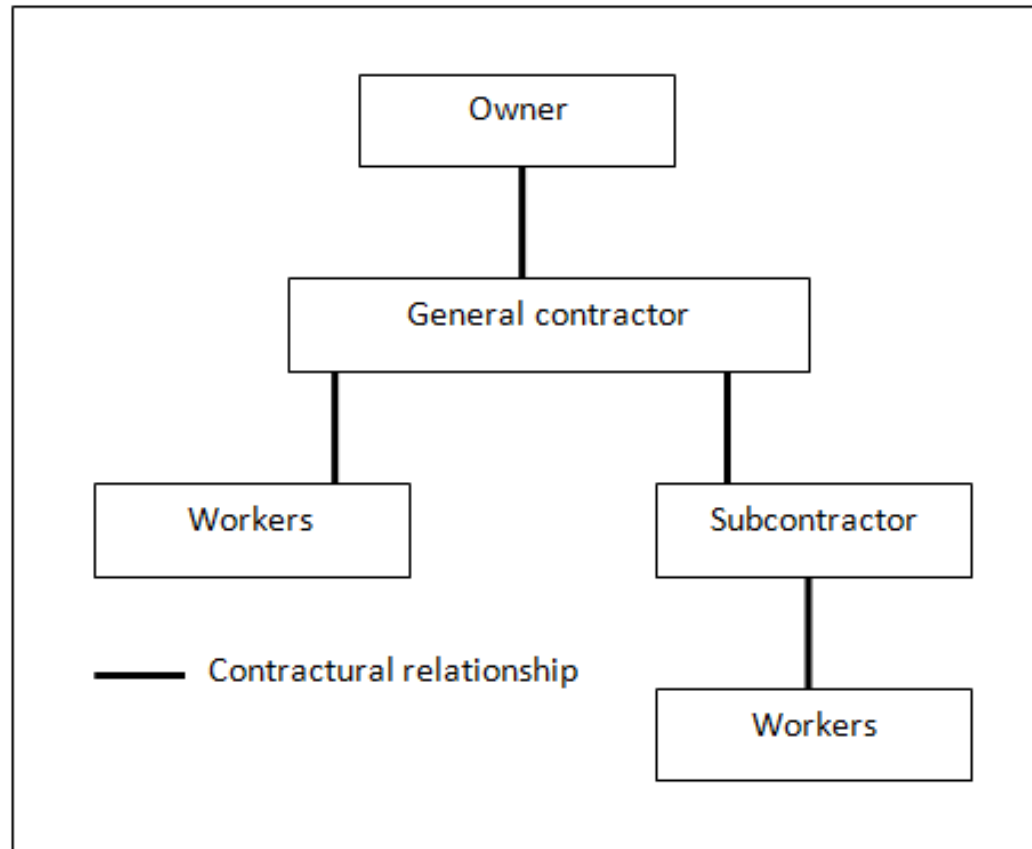


Figure 2: Design-build project procurement contract relationships.

- In this contract, the contractor is working to design, purchase materials, construct and commission a facility with a fixed price. In this system, all activities of a project undertaken by the main contractor. Supervision of construction work performed by main contractors as well.
- In this contract, the developer only give need statement and the contractor will make a comprehensive proposal to complete the project.

Need statement including the following:-

- Facilities needed
- Performance specification
- Common specifications, schedule of finishes
- Electrical and mechanical equipment
- Social and cultural
- Management system and operation

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THANK YOU